What is Claimed is:

1.   A fume hood management system comprising:

2   collection means for collecting data

3   representing an operation state from a plurality of fume

4   hoods; and

5   a server apparatus which comprises arithmetic

6   means for calculating a simultaneous utilization ratio

7   on the basis of the number of simultaneously used hoods

8   and the total number of fume hoods, the number of

9   simultaneously used hoods being obtained from the data

10   collected by said collection means and representing the

11   number of fume hoods that are being used.

2.   A system according to claim 1, further

2   comprising a plurality of fume hoods each of which

3   comprises monitor means for monitoring the operation

4   state.

3.   A system according to claim 1, wherein the

2   arithmetic means calculates the simultaneous utilization

3   ratio by dividing the number of simultaneously used

4   hoods by the total number of fume hoods.

4.   A system according to claim 2, wherein

2   said monitor means comprises operator

3   detection means for detecting a presence of an operator,

4   and

5   said arithmetic means calculates the

6   simultaneous utilization ratio by defining fume hoods

7   whose operator detection means detect no operators and

8   whose sashes are open as fume hoods that are not being

9   used, and sets the calculated simultaneous utilization

10   ratio as an ideal value.

5.   A system according to claim 1, wherein

2   said arithmetic means comprises

3   maximum exhaust airflow calculation means for

4   calculating a maximum exhaust airflow as a sum of

5   instantaneous exhaust airflows of said fume hoods on the

6   basis of the collected data, and

7   safety margin calculation means for

8   calculating a safety margin as a difference between the

9   maximum exhaust airflow and a design maximum exhaust

10   airflow which represents a maximum exhaust airflow that

11   can be exahusted by an exhaust system connected to said

12   plurality of fume hoods.

6.   A system according to claim 5, wherein said

2   arithmetic means calculates the safety margin by

3   assuming that exhaust airflows of fume hoods whose

4   operator detection means detect no operators and whose

5   sashes are open equal a predetermined minimum exhaust

6   airflow, and sets the safety margin as an ideal value.

7.   A system according to claim 1, further
2   comprising a terminal apparatus which is connected to
3   said server apparatus through a communication network
4   and comprises display means for displaying an arithmetic
5   result by said arithmetic means.

8.   A system according to claim 1, wherein said
2   server apparatus comprises said data collection
3   apparatus and said arithmetic means.

9.   A system according to claim 2, wherein
2   said fume hood comprises
3   an enclosure having a movable sash, and
4   aperture ratio sensor means for detecting an
5   aperture ratio of the sash.